



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/664,353

09/17/2003

Yukimasa Yamamoto

9281-4651

4136

7590

06/29/2004

Brinks Hofer Gilson & Lione  
P.O. Box 10395  
Chicago, IL 60610

EXAMINER

LEVI, DAMEON E

ART UNIT

PAPER NUMBER

2841

DATE MAILED: 06/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/664,353

Applicant(s)

YAMAMOTO, YUKIMASA *CA*

Examiner

Dameon E Levi

Art Unit

2841

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 September 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**Claims 1,2 are rejected under 35 U.S.C. 102(b) as being anticipated by Sakai US Patent 5966052.**

Regarding claim 1, Sakai discloses a surface-mounting type electronic circuit unit comprising:

a side electrode arranged on a side face; a circuit substrate having a wiring pattern arranged on an upper face in a state connected to this side electrode(for example, see elements 2,2a,G2,G4,Figs 1-3, see columns 2-5)

and

an electric part connected to said wiring pattern by soldering, wherein said wiring pattern has a connecting conductor electrically connecting said side electrode and said electric part, and said connecting conductor connecting said electric part arranged in a position very near said side electrode is formed in a bent state(for example, see elements BC1,BC2,3,Figs 1-3, see columns 2-5)

Regarding claim 2, Sakai discloses wherein said connecting conductor is formed in the bent state of a zigzag shape. (for example, see elements 3,Figs 1-3, see columns 2-5)

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 3-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sakai US Patent 5966052 in view of Fujiwuru US Patent 5660269.**

Regarding claim 3, Sakai discloses a surface-mounting type electronic circuit unit comprising:

a side electrode arranged on a side face; a circuit substrate having a wiring pattern arranged on an upper face in a state connected to this side electrode (for example, see elements 2, 2a, G2, G4, Figs 1-3, see columns 2-5)

and

an electric part connected to said wiring pattern by soldering, wherein said wiring pattern has a connecting conductor electrically connecting said side electrode and said electric pad, (for example, see elements BC1, BC2, 3, Figs 1-3, see columns 2-5)

Sakai does not disclose a silk layer fabricated by silk screen printing is formed on said connecting conductor connecting said electric pad arranged in a position very near said side electrode so as to cross this connecting conductor.

Art Unit: 2841

Fujiwuru discloses embodiments wherein disclose a silk layer fabricated by silk screen printing is formed on said connecting conductor (for example, see Figs 1A-3, see columns 2-5)

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have formed a silk layer as taught by Fujiwuru in the device as taught by Sakai as placing a silk layer on a conductor pattern in known in the art for increasing electronic connectivity.

**Regarding claim 4**, Sakai discloses wherein said connecting conductor is formed in a straight line shape. (for example, see elements 3, Figs 1-3, see columns 2-5)

**Regarding claim 5**, Sakai discloses wherein said connecting conductor is formed in a bent state (for example, see elements 3, Figs 1-3, see columns 2-5).

**Regarding claim 6**, Sakai discloses wherein said connecting conductor is formed in the bent state of a zigzag shape (for example, see elements 3, Figs 1-3, see columns 2-5)..

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dameon E Levi whose telephone number is (571) 272-2105. The examiner can normally be reached on Mon.-Fri. (9:00 - 5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David S Martin can be reached on (571) 272-2107. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2841

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dameon E Levi  
Examiner  
Art Unit 2841

DEL

A handwritten signature in black ink, appearing to read 'DM', is written over a faint, larger signature.

DAVID MARTIN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800